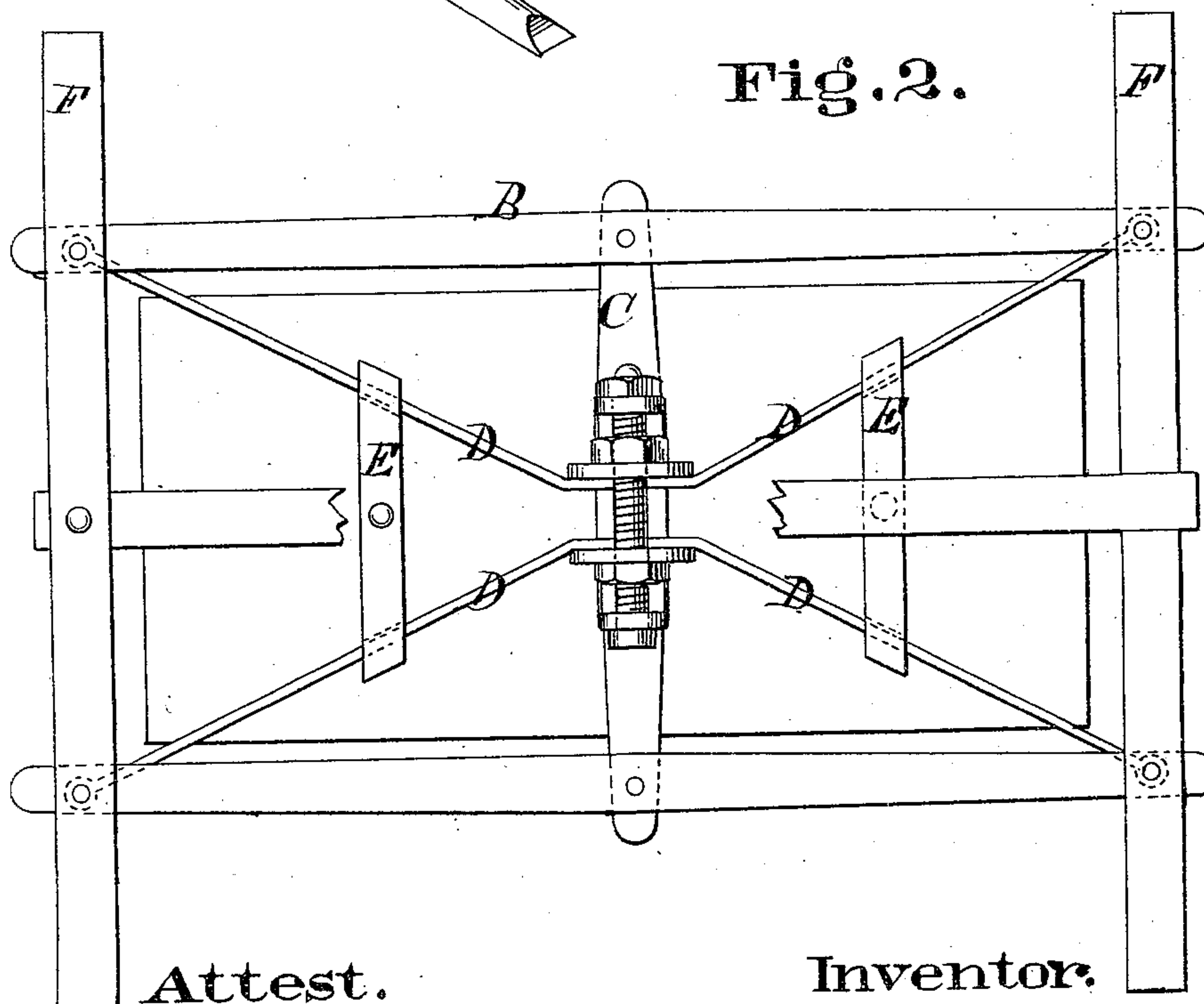
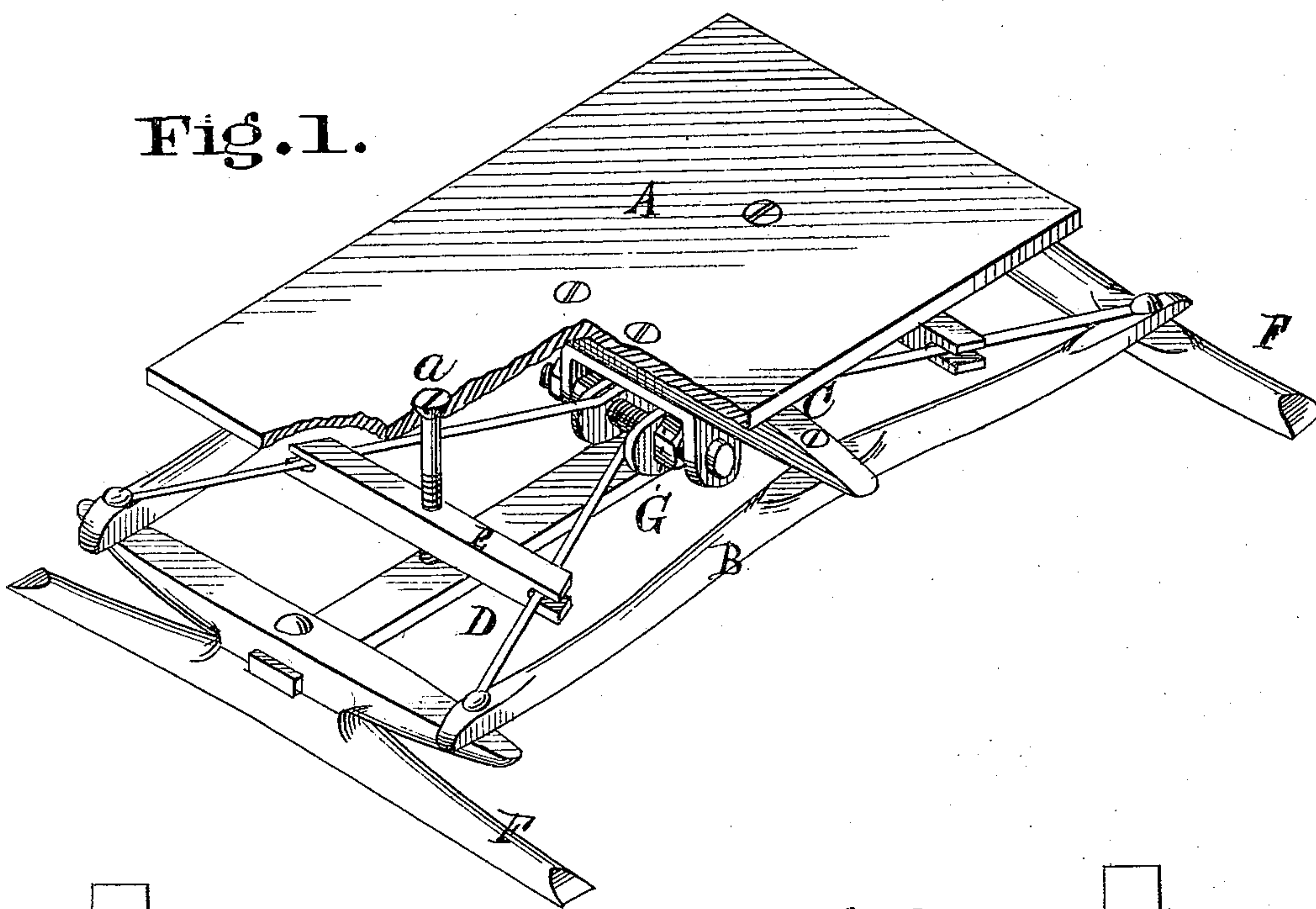


**C. H. GUARD.**  
**Springs for Vehicles.**

No. 153,676.

Patented Aug. 4, 1874.



**Attest.**  
*C. G. Hale.*  
*John E. Hale.*

**Inventor.**  
 Chauncey H. Guard  
 by his atty  
 Fisher & Duncan

# UNITED STATES PATENT OFFICE.

CHAUNCY H. GUARD, OF TIPPECANOE, OHIO.

## IMPROVEMENT IN SPRINGS FOR VEHICLES.

Specification forming part of Letters Patent No. **153,676**, dated August 4, 1874; application filed June 22, 1874.

*To all whom it may concern:*

Be it known that I, CHAUNCY H. GUARD, of Tippecanoe, in the county of Miami and State of Ohio, have invented an Improvement in Wagons, of which the following is a specification:

My invention relates to wagons and buggies or carriages; and consists in the use, in addition to the side bars found on a great many light buggies, of a cross-bar fastened at its middle to the bed of the buggy, and at its ends to the side bars, and of rods running diagonally from the middle of the bed to the ends of the side bars, and supporting the bed at some point between its middle and ends, or at the ends.

Figure 1 is an elevation in perspective of my device, with a portion of the bed cut away. Fig. 2 is a bottom view of the same.

A is the bottom of a wagon-bed, supported in the middle on a bar, C, made of any suitable material. At its ends the bar C is supported upon and fastened to the side bars B of the wagon, which side bars are made in the usual manner. D D D D are rods, preferably of iron or steel, fastened at the ends upon the axle, or on the ends of the side bars B, and running diagonally to near the center of the wagon-bed A, where they may be drawn together and tightened by any suitable device.

E E are bars of wood or metal; or springs may be used, resting on or fastened to the rods D, and supporting the wagon-bed, as shown at *a*.

In the ordinary construction of buggies with side bars, the bed of the buggy must rest on the side bars along so great a part of its length, in order to gain the required support for the ends of the bed, that the greater part of the elasticity of the side bars is lost, whereas in my improved construction not only do I get the entire elasticity of the side bars B, but, in addition, that of the rods D and cross-bars E and C, which latter may, if desired, be made of spring-steel.

The side bars B may be supported at the ends on springs, or in the ordinary manner, or as shown in the drawing, according to the taste of the user.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination of side bars B, rods D, a rod-tightening device, and cross-piece C, substantially as shown and described.

CHAUNCY H. GUARD.

Witnesses:

JOHN C. COLLINS,  
ALBERT M. HECKER.